

ABSTRACT

PORTABLE ELECTRONIC DEVICE INCLUDING CAPACITIVE WATER  
DETECTION MEANS AND METHOD OF IMPLEMENTATION

There is described a portable device (1) including in particular a case (2) closed by a glass (3) and containing means for detecting the presence of water (20, 22) in contact with an external region of the assembly formed by the case and the glass. In a preferred embodiment, the means for detecting the presence of water  
5 include a plurality of capacitive sensors (20) arranged in a peripheral region of the device (1) so as to undergo a variation in their respective capacitances when the latter is immersed in water. Thus, a quantity characteristic of the capacitance value of each sensor (20) is periodically measured and stored. After each measurement, the new value obtained is compared to the preceding one to detect any variation in the  
10 corresponding capacitance. When a part of the capacitive sensors (20) simultaneously see their respective capacitances vary considerably between two measurements, detection of the presence of water is validated.

Figure 1